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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/541,303

06/30/2005

Chen Cai Huang

MR3483-9

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12/19/2008

ROSENBERG, KLEIN & LEE

3458 ELLICOTT CENTER DRIVE-SUITE 101

ELLICOTT CITY, MD 21043

EXAMINER

TAOUSAKIS, ALEXANDER P

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

12/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---|--|--|
| Office Action Summary | Application No. 10/541,303 | Applicant(s) HUANG, CHEN CAI | |
| | Examiner ALEXANDER P. TAOUSAKIS | Art Unit 3726 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 17-18, 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mossner et al (5,822,840) in view of Ohashi (5,832,765)

17. Mossner et al teach a manufacturing method for a resilient hinge of spectacle frame, which comprises at least the following steps: primary shaping step: the axis having a primary shape manufactured from a metal sheet that the head end of the axis is a male hinge structure (*see Figures 18 and column 11 lines 19-20*) the middle part (*the portion between 9 and 11*) is a square pillar with a comparatively smaller cross-

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sectional area and the rear part (9) is a square pillar (*see Figure 18 II, which shows the cross-section column 11 lines 21-23*); diameter-reducing: processing the rear square pillar of the axis having the primary shape into a circular pillar with specified diameter value by compressing and stretching simultaneously (*see column 10 lines 56-58, and note that stamping dies will inherently compress and stretch the pillar*); processing a hinge hole: making a hole at the head of the axis (*see Figure 17 and column 10 lines 63-65*).

Mossner et al fails to teach a non-impact diameter reducing step to reduce the rear square pillar (9) to a circular pillar, where the circular pillar is formed free of residual pressure marks.

Ohashi teaches roll forming a metal workpiece from a square cross-section to a circular cross section (*see Figure 11 and column 12 lines 41-45 and column 5 lines 29-36*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to roll form the rear part (8) of the resilient hinge of Mossner et al into the circular pillar, as taught by Ohashi because it eliminates pressure marks due to impact force, and roll forming has a higher production output than stamping.

18: Mossner et al teach the manufacturing method of a resilient hinge of spectacle frame according to claim 17, wherein the axis having a primary shape is cut out from a metal sheet in the primary shaping step (*see Figure 17 and column 10 line 44*).

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21-22: Mossner et al/Ohashi teach the manufacturing method of a resilient hinge of spectacle frame according to claim 17, wherein it also includes a step of shape the middle pillar of the axis by cutting (*see Figure 18 step I*).

23. Mossner et al/Ohashi teach the manufacturing method of resilient hinge of spectacle frame according to claim 17, wherein in the step of diameter reducing, the rear portion of the axis having a primary shape is compressed and stretch into a circular pillar with a specified diameter by using a diameter-reducing machine (*see column 10 lines 56-58, and note that stamping dies will inherently compress and stretch the pillar*).

24. Mossner et al/Ohashi teach the manufacturing method of a resilient hinge of a spectacle frame according to claim 17, wherein said method includes a step in which the unwanted excess portion of the rear circular pillar of the axis that was produced by the diameter-reducing process can be cut out (*note that the stamping machines used to form the hinge member can be used to cut a portion of the rear circular pillar, although it is not explicitly disclosed*).

25. Mossner et al/Ohashi teach the manufacturing method of a resilient hinge of a spectacle frame according to claim 17, wherein a hinge hold in the male hinge structure of the head of the axis is punched in the hinge hole processing step (*see column 10 lines 63-65*).

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26. Mossner et al/Ohashi teach the manufacturing method of a resilient hinge of spectacle frame according to claim 17, wherein the axis is manufactured from titanium (*see column 10 line 46*).

27. Mossner et al/Ohashi teach the manufacturing method of a resilient hinge of a spectacle frame according to claim 17, wherein it also includes a step of fitting a stopper (503), positioning guide (13), and a resilient medium (7) over the middle pillar to the rear pillar (9) (*see Figure 18*).

Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mossner et al (5,822,840) in view of Ohashi (5,832,765) as applied to claims 18 and 19 above, further in view of Inoue (4,606,007).

19-20. Mossner et al teach the manufacturing method of a resilient hinge of a spectacle frame according to claims 18 and 19, but fails to teach having a primary shape cut out with an NC EDM machine.

Inoue teaches an NC EDM used to machine a workpiece.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacturing the hinge of Mossner et al using the NC EDM machine of Inoue because it is highly efficient has good accuracy and finish (*see Inoue column 2 lines 1-3*).

Response to Arguments

Applicant's arguments with respect to claims 17-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER P. TAOUSAKIS whose telephone number is (571)272-3497. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander P Taousakis
Examiner
Art Unit 3726

/A. P. T./
Examiner, Art Unit 3726

/DAVID P. BRYANT/
Supervisory Patent Examiner, Art Unit 3726